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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,785	03/06/2002	Michael J. O'Donnell	14-526 C1	9394

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EXAMINER

CLARKE, SARA SACHIE

ART UNIT PAPER NUMBER

3749

DATE MAILED: 12/02/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/091,785

Applicant(s)

O'DONNELL ET AL.

Examiner

Sara Clarke

Art Unit

3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-14 and 16-21 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.

- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The art unit to which this application is assigned has changed. Please address future communications to art unit 3749.

Election/Restrictions

Applicant's election without traverse of Group I in Paper No. 8 is acknowledged.

The preliminary amendment, submitted May 15, 2003, was not entered into the application before the previous action was completed and therefore not considered by the examiner before the previous action was completed. Claims 11-21, submitted with the preliminary amendment, have also been included in Group I.

Drawings

New corrected drawings are required in this application in response to Form PTO-948 sent with the previous office action. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. See 37 CFR 1.85(a). The requirement for corrected drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: The amendment in the "New Application Transmittal" adding the specific reference for continuity benefit is redundant with regard to the specific reference in the original specification. Appropriate correction is required.

The abstract of the disclosure is objected to because it is longer than 150 words in length. Correction is required. See MPEP § 608.01(b) and 37 CFR 1.72(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(f) he did not himself invent the subject matter sought to be patented.

(g)(1) during the course of an interference conducted under section 135 or section 291, another inventor involved therein establishes, to the extent permitted in section 104, that before such person's invention thereof the invention was made by such other inventor and not abandoned, suppressed, or concealed, or (2) before such person's invention thereof, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it. In determining priority of invention under this subsection, there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Riehl (US 4951880).

Riehl '880 discloses the invention as claimed including an elongate, generally cylindrical sheet metal body 21 (see column 3, line 20), the inlet end of which includes an integrally formed gas orifice holder 28,29 (see column 3, line 47), a primary air opening (between side parts 29), a plurality of flame ports 30 formed by punching through the wall of the tubular segment (see column 6, line 40), and a mixing chamber (see Fig. 1 between the side parts 29 and where ports 30 begin).

Riehl (US 4418456) is incorporated by reference by Riehl '880, and discloses a gas orifice holder 88,89 mounting a gas orifice element 26. See, in particular, the top of column 6 of Riehl '456.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Riehl (US 4951880) in view of Langman et al. (US 5647341).

Riehl '880 discloses the invention substantially as claimed with the exception of a bluff body.

Langman et al. discloses a tubular burner and teaches the use of a bluff body 18 for developing turbulent flow to enhance mixing of the air/gas mixture. See column 3, lines 48-59.

Thus, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to provide the burner of Riehl '880 with a bluff body as taught by Langman et al. for the purpose of developing turbulent flow to enhance mixing of the air/gas mixture.

Claims 14, 16, 17, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US 3269165) in view of Riehl (US 3874839).

Anderson discloses the invention substantially as claimed with the exception of an integrally formed gas orifice holder.

Riehl '839 discloses a tube burner and teaches the use of an integrally formed gas orifice holder 24 to prevent rattling. See column 3, lines 58-65.

Thus, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to provide the burner of Anderson with an integrally formed gas orifice holder as taught by Riehl '839 to prevent rattling.

Claims 14 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyerhoff et al. (US 4346845) in view of Anderson (US 3269165) and Riehl (US 3874839).

Meyerhoff et al. discloses the invention substantially as claimed with the exception of an integrally formed gas orifice holder and each opening having two side edges, a front edge, and a tab bent inwardly.

Anderson discloses a tube burner and teaches the use of each opening having two side edges, a front edge, and a tab bent inwardly for the purpose of cool operation, which maintains the temperature of the burner tube itself at a relatively low value.

Riehl '839 discloses a tube burner and teaches the use of an integrally formed gas orifice holder 24 to prevent rattling. See column 3, lines 58-65.

Thus, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to provide the burner of Meyerhoff et al. with each opening having two side edges, a front edge, and a tab bent inwardly as taught by Anderson for the purpose of cool operation, which maintains the temperature of the burner tube itself at a relatively low value and an integrally formed gas orifice holder preventing rattling.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225

USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

U.S. Patent No. 6,371,753

Claims 1-4 and 7-10 are rejected under 35 U.S.C. 102(f&g)/103(a) as being unpatentable over O'Donnell et al. (US 6371753) in view of Nolte et al. (US 6027336).

O'Donnell et al. discloses the invention substantially as claimed with the exception of a source of primary air under pressure.

Nolte et al. discloses a tube burner and teaches the use of a source of primary air under pressure from fan 12 for the purpose of the amount of primary air being determined essentially by the blower. See the bottom of column 1 and the top of column 2.

Thus, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to provide the burner of O'Donnell et al. with a source of primary air under pressure as taught by Nolte et al. for the purpose of the amount of primary air being determined essentially by the blower.

With respect to claim 10, it has been held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. See MPEP 2144.04(VI)(B). In this case, providing a second dimple downstream from the first amounts to a mere duplication of the first dimple and thus would have been obvious to

one of ordinary skill in the art. Providing additional mixing of fuel and air is not a new or unexpected result.

Claims 11-14 are rejected under 35 U.S.C. 102(f&g)/103(a) as being unpatentable over O'Donnell et al. (US 6371753) in view of Anderson (US 3269165).

O'Donnell et al. discloses the invention substantially as claimed with the exception of the flame ports including inwardly bent tabs.

Anderson discloses a tube burner and teaches the use of flame ports including inwardly bent tabs to provide maximum burner efficiency. See column 1.

Thus, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to provide the burner of O'Donnell et al. with flame ports including inwardly bent tabs as taught by Anderson for the purpose of providing maximum burner efficiency.

Claims 1-4 and 7-14 are directed to an invention not patentably distinct from claims 1 and 4-6 of commonly assigned U.S. Patent No. 6,371,753. Specifically, in claims 1 and 4-6 of U.S. Patent No. 6,371,753, the invention is recited as claimed with the exception of a source of primary air under pressure and flame ports including inwardly bent tabs.

With respect to Nolte et al., see above. With respect to Anderson, see above.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to provide the burner of claims 1 and 4-6 of U.S. Patent No. 6,371,753 with a source of primary air under pressure as taught by Nolte et al. for the purpose of the amount of primary air being determined essentially by the blower. With respect to claim 10, see the reasoning above. It would have been obvious to one of

ordinary skill in the art at the time of applicant's invention to provide the burner of claim 1 of U.S. Patent No. 6,371,753 with flame ports including inwardly bent tabs as taught by Anderson for the purpose of providing maximum burner efficiency.

Claims 1-4 and 7-10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 4-6 of U.S. Patent No. 6,371,753 in view of Nolte et al. (US 6027336).

In claims 1 and 4-6 of U.S. Patent No. 6,371,753, the invention is recited as claimed with the exception of a source of primary air under pressure.

With respect to Nolte et al., see above.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to provide the burner of claims 1 and 4-6 of U.S. Patent No. 6,371,753 with a source of primary air under pressure as taught by Nolte et al. for the purpose of the amount of primary air being determined essentially by the blower. With respect to claim 10, see above.

Claims 11-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,371,753 in view of Anderson (US 3269165).

U.S. Patent No. 6,371,753 discloses the invention substantially as claimed with the exception of the flame ports including inwardly bent tabs.

With respect to Anderson, see above.

Thus, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to provide the burner claim 1 of U.S. Patent No. 6,371,753 with flame ports including inwardly bent tabs as taught by Anderson for the purpose of

providing maximum burner efficiency.

Claims 1-4 and 7-10 are rejected under 35 U.S.C. 102(e)/103(a) as being obvious over O'Donnell et al. (US 6371753) in view of Nolte et al. (US 6027336). Claims 11-14 are rejected under 35 U.S.C. 102(e)/103(a) as being obvious over O'Donnell et al. (US 6371753) in view of Anderson (US 3269165).

O'Donnell et al. (US 6371753) has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2). See the explanation of obviousness for the rejection under 35 U.S.C. 102(f&g)/103(a) above.

Allowable Subject Matter

Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Blanz (US 4195785) discloses a tubular burner with ports having tabs.


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara Clarke whose telephone number is (703) 308-1388. The examiner can normally be reached Thurs and Fri, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on (703) 308-1935. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-

0861.


Sara Clarke
Primary Examiner
Art Unit 3749

November 20, 2003